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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,578

04/28/2006

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EXAMINER

O BRIEN, JEFFREY D

ART UNIT

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3677

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,578	Applicant(s) TALPE, JOSEPH	
	Examiner Jeffrey O'Brien	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-12 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
2. Page 5, Line 26-29: "gate 3" should be replaced with "gate 4" and "second hinge part 4" should be replaced with "second hinge part 3".
3. Page 6, Line 28: "helical torsion spring 17" should be replaced with "helical torsion spring 18".
4. Page 7, Lines 2-4 conflict with Page 7, Line 19-21 because they indicate the first end of the spring is connected to both "the bottom of the head portion 16" and "a hole...in the bottom of the coupling element 21".
5. Page 12, Line 8: "Figures 6 and 7" should be replaced with "Figures 5 and 6".
Appropriate correction is required.

Claim Objections

6. Claim 10 is objected to because of the following informalities: "hinge shaft (2)" should be replaced with "hinge shaft (10)". Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 1, 3-5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. For Claims 1, 3-5 and 8, the addition of the word "like" or "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. The term "screw-like" should therefore be replaced with a term that does not render it indefinite. Examiner suggests replacing "screw-like element" with "screw element" or "threaded element". Appropriate corrections should be made in the specification to correspond with the correction of the claim without adding any new matter.

10. For Claim 3, the limitation "...that the coupling element rotates over an angle of less than 36 degrees, preferably over an angle of less than 18 degrees" is improper because it does not clearly define which range of angles is being included. For purposes of examination, Examiner has taken this to be the more limiting factor of "an angle of less than 18 degrees" since it is "the more preferable" limitation based on Applicant's Claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, 8-9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/33205 herein referred to as '205.

13. For Claim 1, '205 teaches a gate or door closing hinge comprising: a first hinge part (Fig. 2: 10 and 11a); a second hinge part (11b); a hinge shaft (12) rotatably mounted about a first rotation axis in the first hinge part (10 and 11a) and connecting

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the first hinge part (10 and 11a) to the second hinge part (11b); a torsion spring (13) having a longitudinal axis coinciding substantially with said first rotation axis and having a first end (top) fixed with respect to the first hinge part (10 and 11a) and a second end (bottom) fixed with respect to the hinge shaft (12) to exert a moment onto the first hinge part (10 and 11a); and means (14) for adjusting the moment exerted by the torsion spring (13) on the first hinge part (10 and 11a), characterized in that said adjusting means (14) comprise: a coupling element (15) which is interposed between the first end of the torsion spring (13) and the first hinge part (10 and 11a) and which is rotatably mounted in the first hinge part (10 and 11a) about a second rotation axis which coincides substantially with the first rotation axis; and a screw-like element (16) which is rotatably mounted in the first hinge part (10 and 11a) about a third rotation axis and which has a screw threaded portion arranged to co-operate with the coupling element (15) to rotate the coupling element (15) with respect to the first hinge part (10 and 11a) upon rotation of the screw-like element (16) about the third rotation axis so as to adjust the moment exerted by the torsion spring (13) on the first hinge part (10 and 11a).

14. For Claim 2, '205 teaches a hinge according to claim 1, characterized in that the third rotation axis does not coincide with the first rotation axis (as seen in Figure 2, the rotation axes are substantially parallel).

15. For Claim 8, '205 teaches a hinge according to claim 1, characterized in that the coupling element (15) comprises a worm wheel (15), the screw threaded portion of the screw-like element (16) forming a worm co-operating with the worm wheel (15) of the

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coupling element (15) to rotate the coupling element (15) with respect to the first hinge (10 and 11a) upon rotation of the screw-like element (16).

16. For Claim 9, '205 teaches a hinge according to claim 8, characterized in that the third rotation axis extends substantially at right angles to the first rotation axis (as seen in Figure 2, the rotation axes are substantially parallel).

17. For Claim 12, '205 teaches a hinge according to claim 1, characterized in that the first hinge part (10 and 11a) comprises a tubular housing (10) enclosing at least the hinge shaft (12), the torsion spring (13) and the coupling element (15), the tubular housing (10) of the first hinge part (10 and 11a) being in particular arranged to be mounted in a tubular element fixed against the door or gate (19a) or in a tubular frame member of the gate or door (19a) itself.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/33205 herein referred to as '205 as applied to claim 1 above, and further in view of Wygle et al. (US 6,425,205).

21. For Claim 3, '205 teaches a worm gear in a hinge according to claim 1. '205 does not teach wherein the screw threaded portion of the screw-like element has such a step that, for one rotation of the screw-like element over 360 degrees, the coupling element rotates over an angle of less than 18 degrees, but is instead silent as to the gear reduction ratio. Wygle et al. teaches a worm gear wherein the screw element is turned over 360 degrees and the coupling element rotates over an angle of 18 degrees (a 20:1 gear reduction ratio, Column 7, Lines 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the known gear reduction ratio of Wygle et al. to the hinge member utilizing a worm gear of '205 in order to achieve a desired mechanical advantage.

22. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/33205 herein referred to as '205 as applied to claim 1 above, and further in view of Andre (US 1,265,416) herein referred to as '416.

23. For Claim 7, '205 does not teach wherein the third rotation axis is substantially parallel to the first rotation axis. '416 teaches a door closing mechanism having a screw element (Fig. 6: 24) that cooperates with a coupling element (28) to compress a spring (30). The screw element rotates about an axis which is substantially parallel to the axis about which the door hinge rotates. This positioning allows for an easy adjustment because when applied to the upper portion of a gate or door, it allows for more room to

access the screw element (24) with an adjustment tool and allows for a simpler construction. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the perpendicular screw element (16) and coupling element (15) of '205 with the parallel screw element (24) and coupling element (28) of '416 in order to allow for an easy adjustment of the hinge.

24. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/33205 herein referred to as '205 as applied to claim 1 above.

25. For Claims 10 and 11, '205 teaches all the claimed limitations except for the cooperating stop means. Examiner takes official notice that it is old and well known to use a stop means to limit the angular rotation of a hinge member. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a stop to limit the angular rotation of the hinge member taught by '205.

Allowable Subject Matter

26. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu (US 6,618,902), Young (US 2,629,881), Coombs (US 1,374,437), GB 2099497, and Eckel (US 4,951,351) all teach relevant structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey O'Brien whose telephone number is (571)270-

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3655. The examiner can normally be reached on Monday through Friday 8:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Victor Batson/
Supervisory Patent Examiner, Art Unit 3677